

Draft Amended Rule 403.1  
Fugitive Dust Control  
for the Searles Valley Planning Area

(A) General

(1) Purpose

- (a) The purpose of this Rule is to ensure that the National Ambient Air Quality Standards (NAAQS) for Respirable Particulate Matter (PM<sub>10</sub>) will not be exceeded due to anthropogenic sources within the San Bernardino County portion of the Searles Valley Planning Area (SVPA); and,
- (b) To implement the control measures contained in the Searles Valley PM<sub>10</sub> State Implementation Plan (SIP).

(2) Applicability

- (a) The requirements of this Rule shall apply to owners or operators of the following sources within the San Bernardino County portion of the SVPA:
  - (i) Unpaved roads used for industrial activity;
  - (ii) Paved roads used for industrial activity;
  - (iii) Construction/Demolition activity;
  - (iv) Industrial fugitive dust;
  - (v) Activities on Bureau of Land Management (BLM) land; and
  - (vi) Disturbed surface areas on public land.

(3) Conflicts with Other District Rules

- (a) If there is a conflict between the provisions of this Rule and those of District Rule 403, the conflicting provisions of District Rule 403 are superseded.

## (B) Definitions

For the purpose of this Rule, the following definitions shall apply:

- (1) "Active Operation" - Activity capable of generating Fugitive Dust, including, but not limited to, storage of Bulk Material, Earth-Moving Activity, Construction/Demolition Activity, and non-emergency movement of vehicles on Unpaved Roads, including such activity on San Bernardino County and Bureau of Land Management properties.
- (2) "Alternative PM<sub>10</sub> Control Plan (ACP)" - A plan that incorporates emission reducing measures other than those source-specific measures in section (C), and generates Equivalent Emission Reductions.
- (3) "Baseline Emissions" - Baseline emissions are the product of an emission rate (pounds of PM<sub>10</sub> per unit of operations) and an activity rate (number of operations per day). Baseline emission calculations shall include data for permit units included in the ACP. Calculations shall use the lowest of either: (1) the actual emission rate; (2) SIP allowable emission limit; or (3) Reasonably Available Control Technology (RACT) limits (as defined by MDAQMD regulations as of the date of application). Also, calculations shall use the lowest of either actual, or SIP allowable values for the activity rate. Sources lacking specific daily activity rate records may substitute other records establishing daily PM<sub>10</sub> emissions. Actual values for activity rates shall be based on the average from data for two years directly preceding the source's application for an ACP, unless another two-year period can be shown to the satisfaction of the Air Pollution Control Officer (APCO) and the United States Environmental Protection Agency (USEPA) to more accurately represent the source's normal allowable operations.
- (n) "Brackish Water" - Any non-potable water containing sodium chloride.
- (4) "Bulk Material" - Sand, gravel, soil, aggregate and any other organic or inorganic solid matter capable of releasing dust, not including salt.
- (5) "Construction/Demolition Activity" - Any on-site mechanical activity preparatory to or related to building, alteration, rehabilitation, demolition or improvement of property that results in Disturbed Surface Area, including the following activities: grading; excavation; loading; crushing; cutting; planning; shaping or ground breaking.
- (6) "Disturbed Surface Area" - Portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition, thereby increasing the potential for emission of Fugitive Dust.

Disturbed surface does not include area restored to a natural state with vegetative ground cover and soil characteristics similar to adjacent or nearby natural conditions.

(n) “Dust Control Plan (DCP)” - A District-approved document that describes what measures will be taken at a location to comply with this rule. DCPs must incorporate a coversheet committing to implementation that is signed by a responsible official, a listing of all measures to be employed, a statement of dates of applicability and coverage, an equipment list, a map showing the general location of the project (featuring major streets and highways, range and township, UTM coordinates or latitude and longitude), and a specific map showing the project layout.

(7) "Earth-Moving Activity" - Grading, earth cutting and filling, loading or unloading of dirt or Bulk Materials, adding to or removing from Open Storage Piles of Bulk Materials, landfilling, or soil mulching.

(8) "Enforceable" - Included in a Permit to Operate (PTO) or are otherwise enforced by the District, and submitted as a source-specific SIP revision.

(9) "Equivalent Emission Reductions" - Real, Enforceable, Permanent, Quantifiable, and Surplus emission reductions equal in amount to 120 percent of those required by section (C). Such emission reductions shall be calculated relative to Baseline Emissions. In addition, such emission reductions shall be demonstrated to be equivalent to the reductions required by section (C) using an USEPA-approved modeling demonstration.

(n) “Exterior Transfer Lines” - A stationary conveyor belt not enclosed within a building.

(10) "Fugitive Dust" - Those solid respirable particulate matter emissions which could not reasonably pass through a stack, chimney, or vent. Fugitive emissions are directly or indirectly caused by the activities of man.

(11) "Heavily Traveled" - Carrying more than ten vehicle trips per day with the majority of those vehicles having three or more axles.

(n) “Industrial Fugitive Dust Sources” - Sources of dust within the property line of a facility permitted by the District, other than exhaust stacks, chimneys or vents. These sources only include those directly or indirectly caused by man.

- (12) "National Ambient Air Quality Standards (NAAQS)" - Standards set by the Federal Government that define the acceptable amount of criteria pollutants in the air. Achievement of these standards protects the public's health and welfare.
- (13) "Open Storage Pile" - Any accumulation of Bulk Material with 5 percent or greater silt content not fully enclosed, covered or chemically stabilized. Silt content level shall be assumed to be 5 percent or greater, unless a person can show, by sampling and analysis in accordance with ASTM Method C-136, the silt content is less. Results of ASTM Method C-136 are valid for 60 days from the date the sample was taken.
- (n) "Paved Roads Used for Industrial Activity" - Any vehicle travel way within the property line of a facility permitted by the District that is covered by concrete, asphaltic concrete, or asphalt.
- (14) "Permanent" - Contained in a permit or other condition which ensures the achievement on each and every operating day, and submitted as a source-specific SIP revision.
- (15) "Quantifiable" - Able to be measured and/or calculated before and after a reducing action using the same test methods.
- (16) "Real" - Represents a reduction in actual emissions.
- (17) "Respirable Particulate Matter (PM<sub>10</sub>)" - Any material, except uncombined water, existing in a finely divided form as a liquid or solid at standard conditions whose mean aerodynamic diameter is smaller than or equal to 10 micrometers as measured by an applicable test method, or methods found in Article 2, Subchapter 6, Title 17, California Code of Regulations (commencing with Section 94100).
- (18) "Road Surface Silt Loading" - A measurement of the amount of loose material accumulated on a road surface in terms of weight of material per unit area (for purposes of this Rule, as calculated by the test method described in subsection (F)(1)).
- (19) "Surplus" - Not required by current SIP rules or regulations or relied upon for SIP planning purposes (outside of the Searles Valley PM<sub>10</sub> State Implementation Plan), and not used to meet any other regulatory requirements.
- (20) "Searles Valley Planning Area (SVPA)" - A region coterminous with Hydrological Unit Number 18090205 as defined by the United States Geological Survey.

- (21) "Unpaved Road" - Any vehicle travel way not covered by one or more of the following: concrete, asphaltic concrete, or asphalt.
- (22) "United States Environmental Protection Agency (USEPA)" - The Administrator of the Environmental Protection Agency or the appropriate designee.

(C) Requirements

- (1) The owner or operator of a source subject to this Rule shall comply with the requirements contained in this subsection unless the owner or operator has applied for and obtained an Alternative PM<sub>10</sub> Control Plan pursuant to section (G).
- (2) The owner or operator of a source subject to this Rule shall:
  - (a) Treat a minimum of 12 miles of ~~non-H~~heavily ~~T~~traveled unpaved roads on Searles Dry Lake used for industrial activity in a manner sufficient to maintain Road Surface Silt Loading less than or equal to 0.58 ounces per square yard.
    - (i) ~~For purposes of this subsection~~In lieu of road surface testing, the owner/operator may perform at least weekly brackish watering of at least 12 miles of non-Heavily Traveled Searles Dry Lake unpaved roads ~~is presumed to be sufficient to maintain Road Surface Silt Loadings less than or equal to 0.58 ounces per square yard.~~
    - ~~(ii) If this option is chosen, t~~The owner or operator shall maintain records of treatment activity sufficient to establish location, type and timing of such treatment.
  - (b) Treat a minimum of eight (8) miles of certain ~~H~~heavily ~~T~~traveled unpaved roads, as identified in the Searles Valley PM<sub>10</sub> Plan on the Searles Dry Lake, used for industrial activity in a manner sufficient to maintain Road Surface Silt Loading less than or equal to 0.17 ounces per square yard.
    - (i) ~~For purposes of this subsection~~In lieu of road surface testing, the owner/operator may perform treatment with salt and at least weekly brackish watering of at least eight (8) miles of Heavily Traveled Searles Dry Lake unpaved roads. ~~is presumed to be sufficient to maintain Road Surface Silt Loadings less than or equal to 0.17 ounces per square yard.~~

~~(ii) If this option is chosen, the~~ owner or operator shall maintain records of treatment activity sufficient to establish location, type and timing of treatment.

- (c) Clean paved roads used for industrial activity on a biweekly basis or more often as needed to ensure that spilled and tracked-on Bulk Material is removed rapidly.

- (i) The owner or operator shall maintain records of cleaning activities sufficient to establish location, time and amount of cleaning activities.

- (d) Treat or clean ~~H~~heavily ~~T~~raveled paved roads and areas used for industrial activity in a manner sufficient to maintain a Road Surface Silt Loading less than or equal to 2.94 ounces per square yard.

- (i) ~~For purposes of this subsection~~In lieu of road surface testing, the owner/operator may perform mechanical sweeping and collection on a biweekly basis on Heavily Traveled paved roads and areas used for industrial activity~~is presumed to be sufficient to maintain Road Surface Silt Loadings less than or equal to 2.94 ounces per square yard.~~

~~(ii) If this option is chosen, the~~ owner or operator shall maintain records of mechanical sweeping and collection sufficient to establish location, time and amount of vacuum sweeping.

- (3) For construction/demolition sources subject to this Rule, the owner or operator shall prepare and follow a District-approved Dust Control Plan that contains the following elements:
  - (a) Provisions to maintain the natural topography to the extent possible during grading and other earth movement;
  - (b) A construction schedule that specifies construction of parking lots and paved roads first, and upwind structures prior to downwind structures;
  - (c) Provisions to cover or otherwise contain Bulk Material carried on haul trucks operating on paved roads; and,
  - (d) Provisions to remove Bulk Material tracked onto paved road surfaces.
- (4) For industrial fugitive dust sources subject to this Rule, the owner or operator shall, not later than December 31, 1995:

- (a) Enclose exterior transfer lines greater than thirty (30) feet in length sufficient to cover the top and sides of the bulk material being transferred.
- (b) Permanently eliminate at least 2,750 square feet of Bulk Material storage pile surface area that was exposed during 1990.
  - (i) The owner or operator shall maintain records of storage pile reduction or limitation shall be maintained sufficient to identify the location, type (including storage pile silt content) and timing of storage pile modification.
- (c) Cover or otherwise contain Bulk Material carried on haul trucks while operating on paved roads as specified in the Searles Valley PM<sub>10</sub> Plan.
  - (i) Fly and bottom ash haul trucks maintaining moisture content of at least 12 percent need not be covered.
- (d) Treat heavily traveled unpaved/paved road access points in a manner sufficient to maintain a Road Surface Silt Loading of 2.94 ounces per square yard on the paved road surface adjacent to the unpaved road.
  - (i) For purposes of this subsection, mechanical sweeping and collection on a biweekly basis is presumed to be sufficient to maintain Road Surface Silt Loadings less than or equal to 2.94 ounces per square yard.
  - (ii) The owner or operator shall maintain records of activities performed to maintain the specified Road Surface Silt Loading sufficient to establish location, time and type of treatment.
- (5) For activities occurring on BLM land, the District and BLM shall jointly prepare a dust control plan that reduces BLM PM<sub>10</sub> emissions by at least 20 percent relative to 1990 levels, [not later than December 31, 1995](#). The dust control plan may include, but not be limited to, the following reasonably available control measures (RACM):
  - (a) Reduce PM<sub>10</sub> emissions associated with activities on BLM land by 20 percent relative to 1990 levels;
  - (b) Provide wind and water erosion controls sufficient to minimize deposition of silt on paved roads;

- (c) Provide for paving or other stabilization of major unpaved/paved road access points;
- (d) Provide for paving or other stabilization of major vehicle staging and parking areas;
- (e) Provide for signage that reduces vehicular speeds, particularly during high wind episodes.

#### (D) Exemptions

- (1) The requirements of this Rule shall not apply to:
  - (a) Agricultural operations, as defined by California Health & Safety Code Section 41704(b);
  - (b) Actions required by federal or state endangered species legislation;
  - (c) Residential property;
  - (d) Active Operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency;
  - (e) Active Operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions;
  - (f) Non-periodic (occurring no more than three times per year and lasting less than thirty cumulative days per year) or emergency maintenance of flood control channels and water spreading basins;
  - (g) Blasting operations as permitted by the California Division of Industrial Safety;

#### (E) Recordkeeping

- (1) The owner or operator shall maintain records required by this Rule on site or be readily accessible for at least two years after the date of each entry and shall be provided to the District upon request.



(F) Test Methods

- (1) Compliance with the provisions of this District Rule shall be determined as follows:
  - (a) For Road Surface Silt Loading: shall be calculated in ounces of silt per square yard and be determined by sweeping and vacuuming at least 5 pounds of material from representative strips of known area of the surface and establishing the 75 micron or silt fraction through the use of a 200 mesh screen (USEPA AP-42 "Compilation of Air Pollutant Emission Factors" Section 11.2.6, ASTM Standard D-75 "Standard Practice for Sampling Aggregates," and ASTM Standard C-136 "Sieve Analysis of Fine and Coarse Aggregates").
  - (b) For PM<sub>10</sub> emissions and emission reductions: amounts shall be calculated using USEPA "Control of Open Fugitive Dust Sources" (EPA-450/3-88-008).
  - (c) Compliance with the requirement "Cover Haul Trucks" is equivalent to complying with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code on both public and private roads.

(G) Alternative PM<sub>10</sub> Control Plans (ACPs)

- (1) An owner or operator of a source subject to this Rule may, at any time after the adoption of this Rule, apply for and obtain District approval for an ACP as set forth in this subsection.
- (2) Application
  - (a) The owner or operator may apply for an ACP by submitting a plan to the District which includes the following elements:
    - (i) Name(s), address(es), and phone number(s) of the official(s) responsible for the preparation, submittal, and implementation of the ACP;
    - (ii) Description and location of operation(s);
    - (iii) Listing of all Active Operations included in subsection (G)(2)(a)(ii) generating Fugitive Dust emissions;

- (iv) Estimation of baseline, annual, daily emissions from each source identified in subsection (G)(2)(a)(iii);
- (v) Description of actions required by the applicable portion of section (C);
- (vi) Description of actions proposed to generate Equivalent Emission Reductions instead of subsection (G)(2)(a)(v). Such description shall be sufficiently detailed to demonstrate Real, Enforceable, Permanent, Quantifiable, and Surplus Equivalent Emission Reductions during all periods of Active Operations;
- (vii) Commitment to a post-approval monitoring program to evaluate the effects of subsection (G)(2)(a)(vi) actions; and,
- (viii) Description of contingency measures for implementation if actions proposed for subsection (G)(2)(a)(vi) prove insufficient.
- (ix) An application for an ACP which proposes using add-on controls to achieve Equivalent Emission Reductions shall specify test methods for both the emission collection system and the control system.

(3) Issuance Procedure

- (a) The owner or operator of a source subject to this Rule electing to obtain an approved ACP shall submit an application for an ACP to the APCO in writing.
  - (i) The owner or operator shall remain subject to federal enforcement of existing section (C) and SIP limits federal approval of unless and until USEPA approves the ACP as a source specific SIP revision pursuant to Section 110(a)(3)(A) of the Federal Clean Air Act.
- (b) The APCO shall either approve, conditionally approve, or disapprove a proposed ACP, in writing, within 30 calendar days of receipt of the ACP, based on the following criteria:
  - (i) The proposed ACP demonstrates equivalent emissions reductions to those required under section (C); and

- (ii) The proposed ACP does not result in a net increase in any baseline emission of an air pollutant regulated, proposed for regulation, listed or the subject of a "notice-of-intent-to-list" pursuant to the provisions of 42 U.S.C. §7412, National Emission Standards for Hazardous Air Pollutants (Federal Clean Air Act §112 "NESHAPS"). The baseline emissions of a hazardous pollutant shall be determined by the lower of either actual or NESHAPS allowable emissions.
  - (iii) Add-on controls shall not be considered part of an approved ACP unless such control are incorporated in an emissions averaging approach to compliance.
  - (iv) The proposed ACP complies with, all requirements of subsection (G)(3) and all applicable requirements of section (G) shall be satisfied;
- (c) If the APCO conditionally approves an ACP the APCO shall notify the applicant in writing of the ACP's conditional approval and of the deficiencies which require corrections.
  - (i) The applicant shall submit a revised ACP within 90 days or the ACP is automatically deemed disapproved. The APCO shall evaluate the revised ACP based upon the criteria of subsection (G)(3)(b).
- (d) After the APCO approves the proposed ACP the permits for any existing permit units included in the ACP shall be surrendered and new permits incorporating provisions of the ACP shall be issued.
  - (i) ACP emission reductions which are accomplished through equipment shutdown or production curtailment shall have their permanency ensured by permit or other conditions which limit the total PM<sub>10</sub> emissions from the equipment in question.
  - (ii) Notwithstanding provisions of District Rule 219, if the ACP encompasses the operation of equipment not requiring a permit, such equipment shall lose its exemption status and require a permit.
- (e) After approving an ACP, the APCO shall notice a public hearing regarding the ACP before the Governing Board of the District .

- (i) Such notice shall be published in a newspaper of general circulation at least 30 days prior to the meeting of the Governing Board at which the public hearing is scheduled to take place.
  - (f) At the public hearing the APCO shall recommend that the Governing Board adopt the approved ACP for submission to the California Air Resources Board (ARB) as a SIP submittal.
  - (g) If adopted by the Governing Board, the ACP shall thereafter be submitted by the APCO to ARB for submittal to USEPA as a source-specific revision to the SIP.
- (4) Renewal
- (a) An approved ACP shall be valid for a period of one year from the date of approval by the APCO.
  - (b) Approved ACPs shall be resubmitted, annually, at least 90 days prior to expiration date shall expire.
    - (i) If all Fugitive Dust sources and emission reduction-producing actions remain identical to those identified in the previously approved ACP, the resubmittal may contain a simple statement of "no-change." Otherwise a resubmittal shall conform to the requirements of subsection (G)(1).
  - (c) The APCO shall send a list of all approved ACPs to USEPA on an annual basis.
- (5) Recordkeeping
- (a) The owner or operator operating under an approved ACP shall maintain daily operating records, information regarding operations, source tests, laboratory analyses, monitoring data, and any other appropriate information in a manner and form sufficient to determine the compliance of the owner or operator with the ACP on a 24-hour basis.
- (6) Violations
- (a) Failure to comply with any provisions in an approved or conditionally approved ACP shall be a violation of this Rule.

## (H) Contingency Measures

- (1) The requirements of this section only apply if USEPA makes a finding, as evidenced by publication in the Federal Register, that there has been a violation of the PM<sub>10</sub> NAAQS within the SVPA.
- (2) Contingent Requirements
  - (a) The owner of public lands containing disturbed surface areas shall:
    - (i) Treat a minimum of 46 acres to at least a 90 percent control level.
    - (ii) For the purpose of this subsection chemical stabilization shall be presumed to be treatment to a 90 percent control level.
    - (iii) Maintain records of treatment activities sufficient to establish the location, type and timing of such treatment.

## Searles Valley Planning Area (San Bernardino County Portion)

